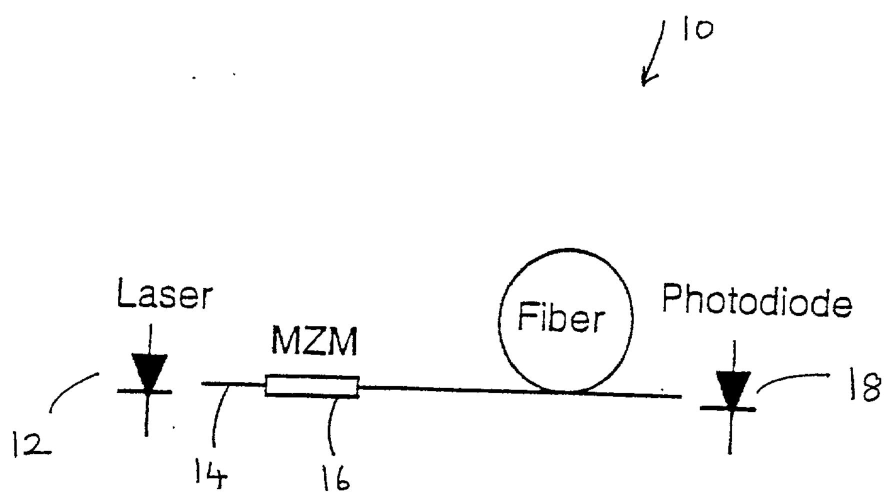


FIG. 1

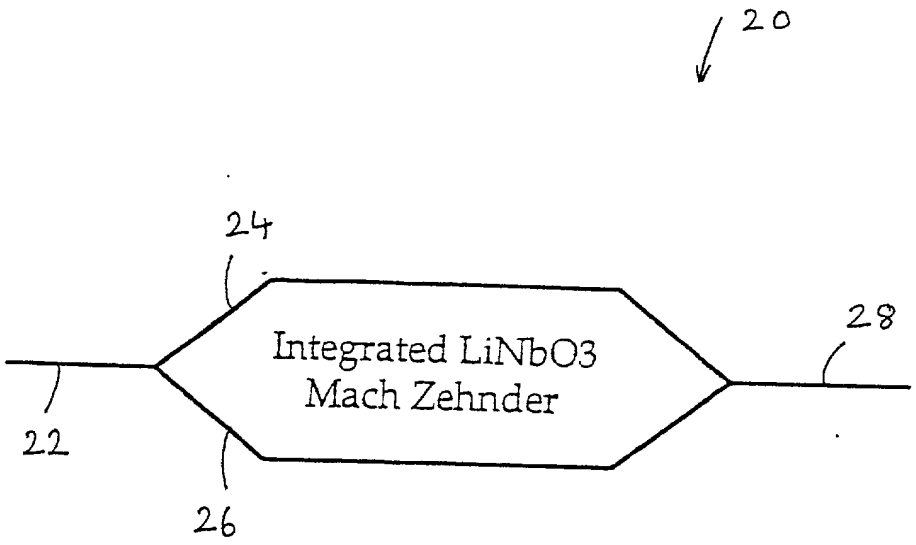
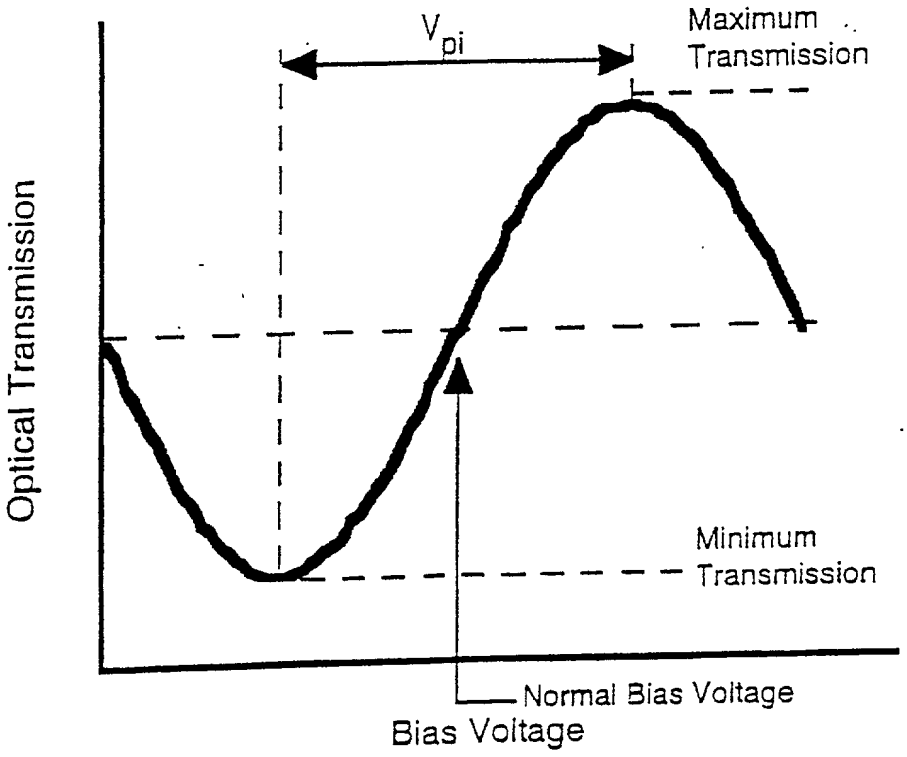


FIG. 2



FIG·3

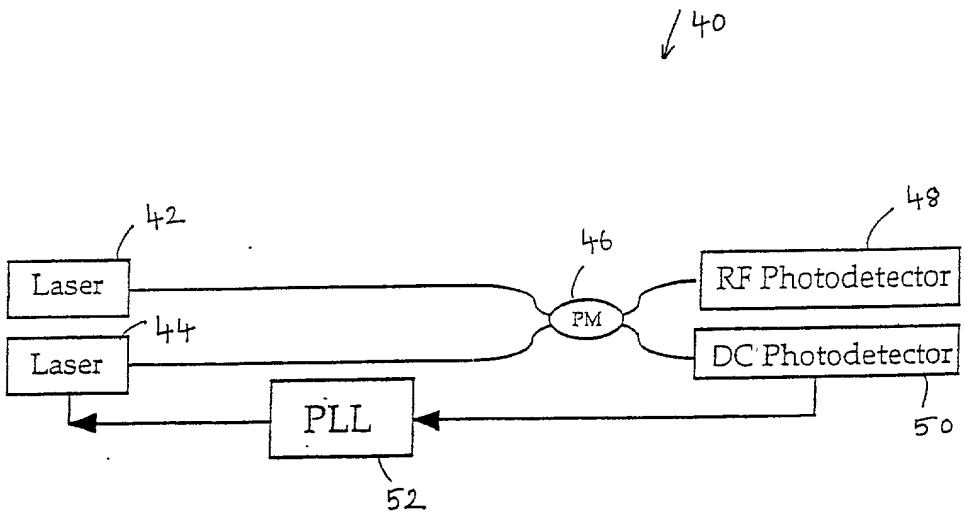

40
42
Laser
44
Laser
46
PM
48
RF Photodetector
DC Photodetector
50
PLL
52

FIG. 4

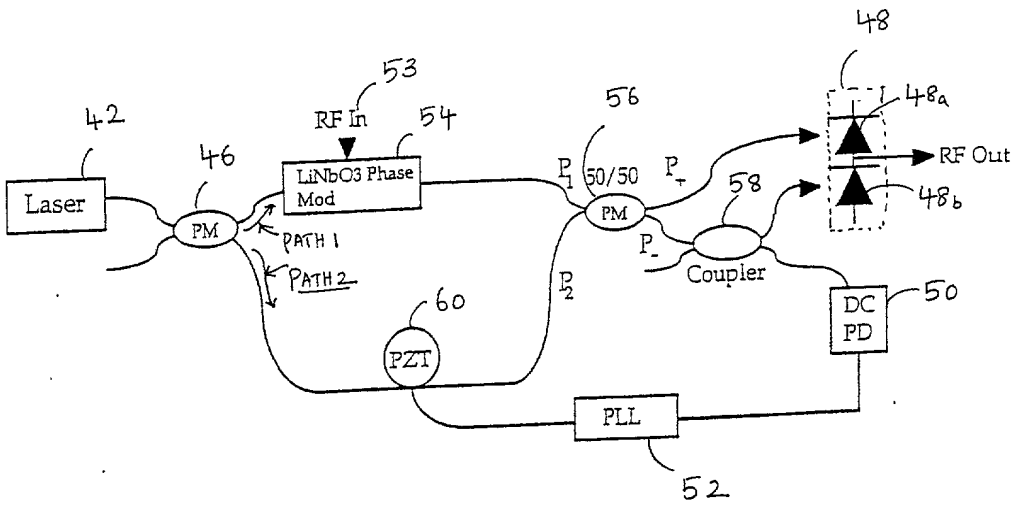

48
53
RF In
54
56
48a
42
46
LiNbO3 Phase Mod
50/50
RF Out
Laser
PM
PATH 1
PM
58
48b
PATH 2
Coupler
60
50
DC PD
PZT
PLL
52

FIG. 5

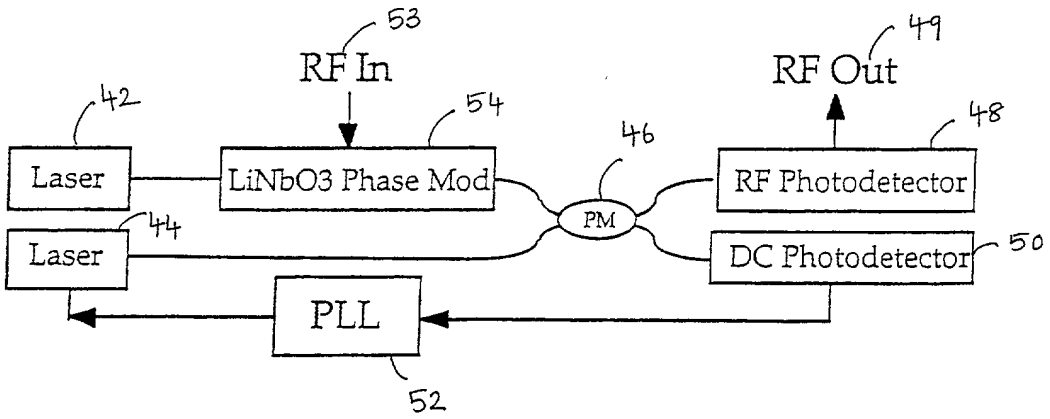

53
RF In
49
RF Out
42
54
46
48
Laser
LiNbO3 Phase Mod
PM
RF Photodetector
44
Laser
DC Photodetector
50
PLL
52

FIG. 6

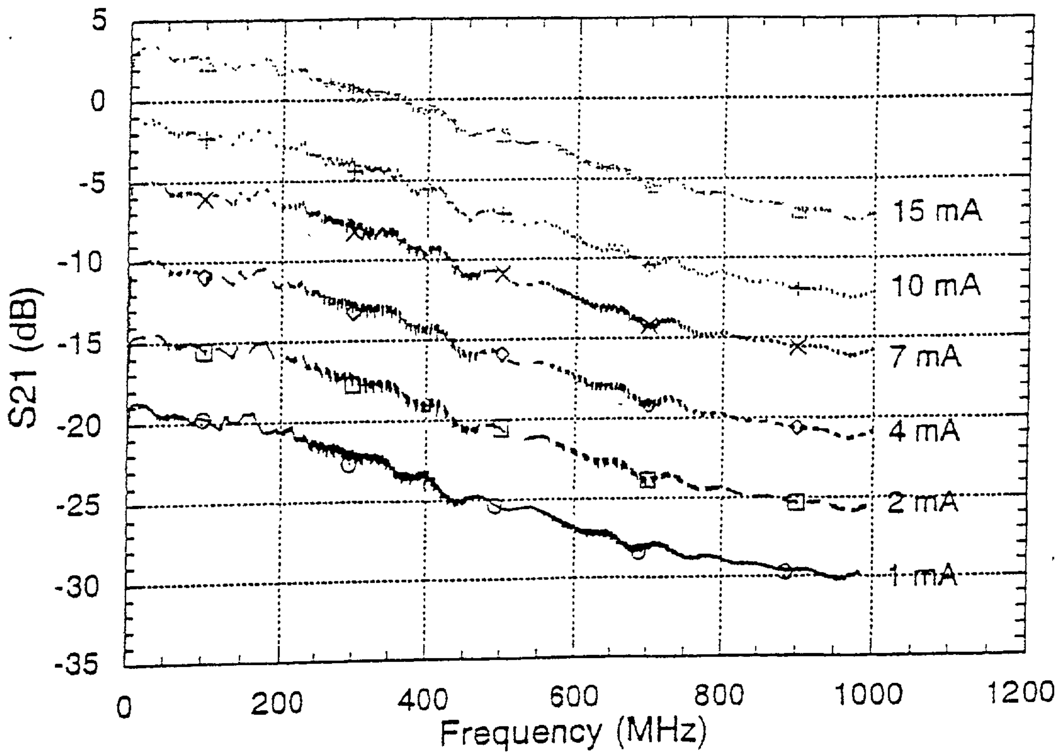

S21 (dB)
Frequency (MHz)
5
0
-5
-10
-15
-20
-25
-30
-35
0
200
400
600
800
1000
1200
15 mA
10 mA
7 mA
4 mA
2 mA
1 mA

FIG. 7

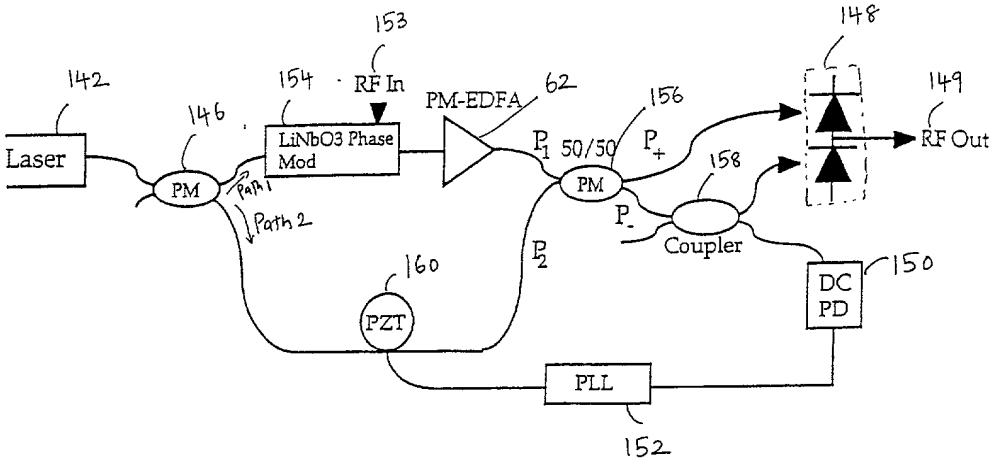

153
148
142
154
RF In
PM-EDFA
62
156
149
146
LiNbO3 Phase Mod
P1
50/50
P+
RF Out
Laser
PM
Path 1
Path 2
PM
158
P-
Coupler
160
P2
DC PD
150
PZT
PLL
152

FIG. 8

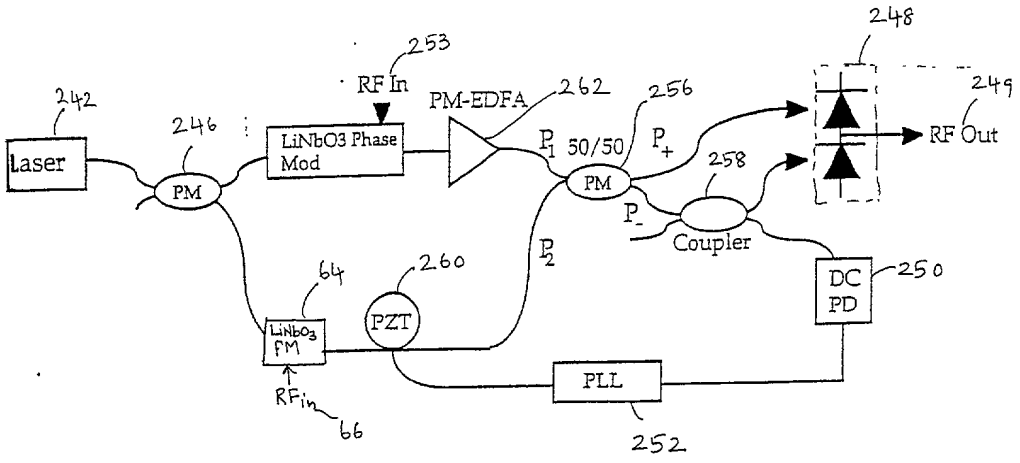

248
253
RF In
242
246
PM-EDFA
262
256
249
Laser
LiNbO3 Phase Mod
P1
50/50
P+
RF Out
PM
PM
258
P-
Coupler
64
260
P2
DC PD
250
LiNbO3 FM
PZT
PLL
RFin
66
252

FIG. 9